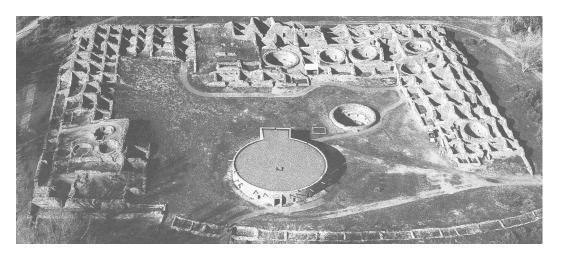
Field Report Aztec Ruins National Monument

■ 1.0 Summary

Aztec Ruins National Monument is located in the northwest corner of New Mexico just outside the City of Aztec. The Ruins offer visitors opportunities to contemplate the ancestral connections this region holds for many southwest Indian tribes (see Figure 1). Aztec National Monument is a candidate for alternative transportation that would link it to the downtown area of Aztec and serve to promote local economic development. The West Ruins of Aztec Ruins National Monument prompted President Warren G. Harding to establish Aztec Ruins National Monument by Presidential Proclamation No. 1650 of January 24, 1923 (42 Stat. 2295), "... with a view to the preservation of said ruin for the enlightenment and culture of the Nation."

Figure 1. Aerial view of Aztec National Monument, Looking North



The need for Alternative Transportation Systems (ATS) at Aztec National Monument is important in the sense of creating a sustainable, culturally appropriate connection between modern society and ancient ruins, but not urgent in the sense of impending safety or operational problems.

The NPS and the public have developed a General Management Plan. The plan proposes solutions for management problems facing the Monument. Among these problems is the need for transportation facility improvements that would accommodate increased visitation.

There are two feasible alternatives suggested to assist the Park in meeting its goals, while providing a safe and enjoyable visit to Aztec Ruins. Feasible alternatives include a circulator

shuttle system from downtown Aztec to the Aztec Ruins via existing roads and a bicycle/pedestrian trail system from downtown Aztec to the Monument via a new trail system.

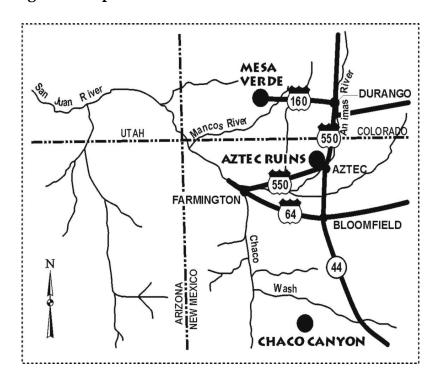
■ 2.0 Background Information

2.1 Location

The Aztec Ruins National Monument is located on Ruins Road about three-quarters of a mile north of Aztec Blvd., just outside the City of Aztec, New Mexico. Ruins Road is a two-lane road that provides visitors access to the Monument from the south through a neighborhood and school zone.

From a regional level, visitors can travel to the area from three directions (see Figure 2). U.S. 550 brings travelers east from Farmington, New Mexico or south from Durango, Colorado. The Monument can also be accessed by traveling north from Bloomfield, New Mexico via NM 44 (a.k.a. NM 544 and soon to be redesignated U.S. 550 to Bernalillo). Other national parks near Aztec Ruins include Mesa Verde, 85 miles northwest, and Chaco Canyon, 60 miles southwest. The Monument is south of the San Juan Mountains and near the Animas River, which flows year-round across the plains of northwestern New Mexico.

Figure 2. Regional Map



2.2 Administration and Classification

Aztec Ruins is a National Monument administered by the NPS, U.S. Department of the Interior. The Park superintendent is Barry Cooper.

2.3 Physical Description

The key physical characteristics of the Monument related to transportation are:

- Visitors arrive at the Monument via Ruins Road, which is a two-lane road without sidewalks or shoulders.
- Except for Ruins Road, the monument is physically separated on the east and south from the City of Aztec by the Animas River and on the west and north by undeveloped land.
- The Monument has two parking lots, one for passenger cars and trucks, and another for recreational vehicles.
- Pedestrian access to the ruins begins with a quarter-mile self-guiding trail that winds through the West Ruin, the remains of a multistory pueblo of about 400 rooms. The trail passes through several rooms and the reconstructed Great Kiva. Some of the trail and ruins are not handicapped accessible.
- A separate walking trail provides access to a picnic area, east of the Visitor Center and parking area. There are six picnic tables, one of which is handicapped accessible.
- The General Management Plan (GMP) identified a need for facility improvements and additions as the park area expands into its new (as of 1988) boundaries.

2.4 Mission and Goals of the Memorial

According to the NPS Organic Act of 1916, as amended, it is the mission of the U.S. Department of the Interior

"... To conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations."

The West Ruins of Aztec Ruins National Monument prompted President Warren G. Harding to establish Aztec Ruins National Monument by Presidential Proclamation No. 1650 of January 24, 1923 (42 Stat. 2295), "... with a view to the preservation of said ruin for the enlightenment and culture of the Nation."

Because of its significance in the prehistory of our Nation, the Monument is listed on the National Register of Historic Places and as a World Heritage Site.

A trend to develop the private land surrounding the Monument for both residential and commercial uses, including oil and gas drilling, has created a number of potential impacts on the Monument, which may affect long-range goals. Congress passed legislation in 1988 to add 293 acres to the Monument's original 27-acre site, thereby expanding the Monument to nearly 320 acres.

2.5 Visitation Levels and Visitor Profile

Over the last 18 years, Aztec Ruins National Monument has averaged nearly 72,000 visitors per year. Visitation in any one year has been as high as 93,900 visitors in 1992 and as low as 58,200 in 1985. The downturn in visitation to the Monument since 1992 is attributed in part to the 1993 discovery of the Hanta virus, a potentially fatal virus associated with a flu-like disease, Respiratory Distress Syndrome (ARDS). It is estimated there has been a 20 percent drop in the tourism industry in the region (a drop to approximately 65,000 visitors per year to the monument) as a result of this virus and associated publicity.

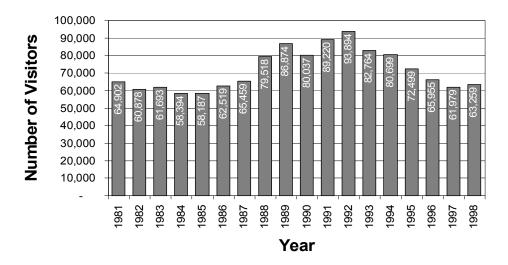
The peak season for visitation is during the summer months. More than 45 percent of visitors come during the months of June through August, or more than 66 percent from May through September. During the summer months visitation averages over 300 visitors per day, with the highest peak days near 500 visitors. On average weekend day visitation is 10 percent higher than the typical weekday, based on 1998 – 1999 data.

The profile of the typical visitor is a person or group of persons who stop at the Monument while on their way to Mesa Verde National Park or the Grand Canyon. The typical visitor makes an average visit of 1.5 hours. According to 1999 visitor data, most of the visitors are from the United States, and approximately 10 to 15 percent of the visitors are from other countries. The Aztec Chamber of Commerce estimates that 10 to 15 percent of all visitors also see other sights in the area such as the local museums in Aztec, Salmon Ruins west of Bloomfield, or Navajo Lake State Park east of Aztec.

The Superintendent reports a long-term trend towards older visitors. He also reports increases in visitation during the "shoulder seasons" of late spring and early fall and a less-pronounced visitor peak during June through August.

Table 1. Visitation Trends

Aztec National Monument Visitation Trends 1981-1998



■ 3.0 Existing Conditions, Issues and Concerns

Aztec Ruins National Monument, by national standards, is a small National Monument, containing only 320 acres. If current land development trends continue, the Monument will become an island in a sea of development. The existing mobile home parks to the south and the scattered developments in other directions, including three nearby natural gas wells and associated treatment and storage facilities are conspicuous from the Monument despite a buffer of pasturelands and orchards. New developments even closer to the monument may be very intrusive. The topography of the area adds to the problem. To the north, developments would be conspicuous on the ridge several hundred feet above the primary resources. To the south and west, the land slopes gently away from the monument, making developments even more noticeable. An irrigation ditch provides water for the land both inside and outside of the monument boundary.

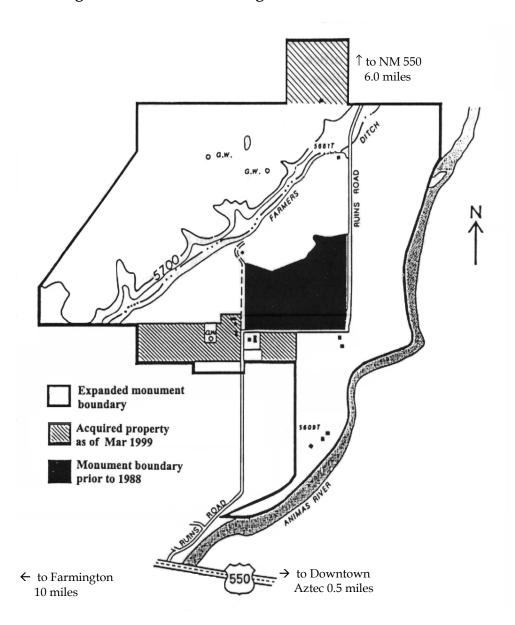


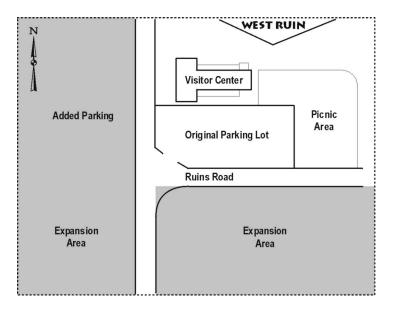
Figure 3. Irrigation Ditch Surrounding the Monument

In 1988, the NPS acquired a 3.96-acre tract of land immediately to the south of the original Monument and it was rezoned to allow for development of a recreational vehicle (RV) campground. Just north of this area is the Monument's main parking area entrance. The high stucco walls and pillars at the entrance to the parking area blocks the view between drivers and pedestrians leaving the monument parking area and drivers of westbound vehicles approaching the right-angle turn in Ruins Road near the original monument entrance. The oddly aligned three-way intersection could cause vehicular/pedestrian conflicts.

An expansion area west of the Visitor Center was proposed to fulfill the needs identified in the General Management Plan (see Figure 4). The NPS purchased several high-priority parcels west of the Visitor Center, including the Aztec Trading Post and its associated

buildings, which will allow employees to move into much needed office space. In addition, funding received in 1997 from the Federal Lands Highway Program allowed construction of a parking area for buses and recreational vehicles west of the current parking lot. The RV parking area was completed in the summer of 1998.

Figure 4. Expansion Area Layout



3.1 Transportation Conditions, Issues and Concerns

The 1989 General Management Plan and the 1993 Statement for Management document identified the following transportation and transportation-related issues:

- More parking was (and will be) needed as visitation increases with the acquisition of land to reach the full extent of the Monument boundaries.
- Private residential development north of the Monument, west of the Animas River, has led to increased traffic on Ruins Road. The increased traffic creates visual and auditory impacts that degrade the experience of Monument visitors.
- Continuing development of oil and gas resources in the vicinity of the Monument increases heavy truck traffic that creates vibrations that can damage archaeological resources.
- The potential for erosion and water damage of the archaeological resources increases with the addition of impervious surface via the construction of new homes and roads.
- Adjacent development increases activity levels in general, and increases the number of
 access points in particular, thereby increasing the potential for unauthorized entry to
 and damage of the archaeological resources.

Road Access

The main access route to the Monument from Aztec Boulevard is the two-lane Ruins Road, passing through residential areas and a school zone. The road also serves nearby oil and gas fields. The City of Aztec and San Juan County maintain the road. The intersection of Ruins Road and NM 550 has older components which could be updated.

Increased traffic on this road by local residents and visitors has created concerns about the effect of noise, fumes and vibrations on the fragile Ruins environment. In addition to conflicts with the general traffic, there is no transition along the route from contemporary civilization to the environment of the Ruins.

In the 1980s, the City of Aztec studied the feasibility of extending NM 44 to the section of Ruins Road that runs along the original 27-acre eastern boundary. The NM 44 extension would have provided better access to the Monument and more direct access to areas north of the monument from historic Main Street. A bicycle/pedestrian path would have been included along the highway's parkway-style corridor, which would have provided the needed transition for the visitor from the urban scene to the Monument environment. The plan for the highway extension was abandoned in favor of focusing resources on widening NM 550 through town.

Widening of NM 550 between Aztec, New Mexico and Durango, Colorado is expected to cause sporadic delays over the next several years. This may encourage some would-be visitors to take alternate routes, which would bypass Aztec.

Parking

Two paved parking lots serve the Monument site and provide a combination of 58 parking spaces. Issues related to the size of the original lot created a need to expand parking to the west of the Visitor Center. The second lot was completed in 1998.

High stucco walls and pillars at the entrance to the first parking lot block the view between drivers and pedestrians leaving the parking area. The NPS needs to address issues with the line of sight here and the odd alignment of the lot's entrance at Ruins Road. A portion of Ruins Road is scheduled for relocation in 2002.

Bicycle and Pedestrian Access

Biking is allowed on the road to the Monument. The bike rack at the west end of the original parking area can accommodate an alternating arrangement of bikes. The placement of the bicycle rack against a wall renders half of the rack's capacity useless. Regarding the other half of the rack, one wheel of any adult bicycle would hang off the curb on one side. Improvements could be made with bike parking.

A bicycle/pedestrian trail and bridge are planned to link the City's parks to the Monument and the Monument to the historic downtown Main Street area.

Public Transit

A Durango-based operator established an experimental, seasonal horse-drawn carriage route in 1999. Utilization of this service was not as successful as anticipated. The operator has refocused his efforts on downtown Aztec carriage rides on Saturdays only.

There is a demand-responsive transit program in the City of Aztec serving senior citizens. The bus rarely goes to the Monument.

3.2 Community Development Conditions, Issues and Concerns

Land

Numerous Management Zones were established by the NPS to define appropriate land uses within certain areas of the Monument. These zones indicate where visitor uses, management functions and operations, transportation improvements, and development should be located. In accordance with legislative mandates, the entire area within the Monument boundary is designated as a historic zone. The following management subzones were delineated to guide future management and use:

- 1. Preservation Subzone
- 2. Adaptive Use Subzone
- 3. Park Development Subzone (which includes the direction necessary for the development of Monument roads and parking areas)
- 4. Landscape Management Subzone
- 5. Landscape Modification Subzone
- 6. Special Use Transportation/Utilities Subzone

After the 1988 expansion of the park boundaries, the NPS acquired the Aztec-Byers Trading Post site west of the Aztec Ruins Visitor Center. National Monument officials have recently begun discussions of a property exchange for portions of this site with the City to acquire another tract of vacant land within the expanded boundaries.

The City of Aztec and San Juan County have concurrent subdivision jurisdiction in the area north of the Monument. Currently, the City of Aztec is requiring city standards for all major subdivisions in this area.

The City is contemplating future annexation of the land north of the Monument. No date has been set for annexation. The City wishes to garner the support of the development community before beginning formal annexation procedures. Other than protecting the resources within its boundaries, the NPS remains neutral on the issue of annexation.

Economy

The local economy depends on commercial, retail and small manufacturing businesses to provide employment and trade in the Four Corners area. Farmington is a regional hub. Wal-Mart and other discount stores in Durango and Cortez are perceived to be reducing the number of regional discount shopping trips to Farmington.

Citizen input to the City has indicated that local residents do not want Aztec to become a destination for tourists. There is concern that the addition of hotels and motels would negatively affect the small town character of Aztec.

In addition to the physical separation of the Monument from the downtown there is also a commercial separation. The mission of the NPS does not permit it to commercialize the Monument. In addition recent City of Aztec promotions, such as the high-noon gunfight, appear to sell an image of the City not relying on the cultural resource base of the Monument.

3.3 Natural or Cultural Resource Conditions, Issues and Concerns

Officials at the Aztec Ruins National Monument request that the City of Aztec keep in mind its zoning and development controls as the City continues its expansion around the Monument. Park officials would prefer that there be only development that would be compatible with the Monument, which would fulfill the congressional mandate to encourage public use and enjoyment of NPS units. The resources within the expanded 1988 boundary have high-interpretive/recreational potential, such as the river and the bluffs, and a transition is not currently provided for the visitor from the urban environment to the Monument environment. Therefore, curbing commercial/industrial development around the Monument will help create the appropriate transitional buffers.

The New Mexico State Highway and Transportation Department (NMSHTD) has placed an Aztec Monument historical marker on southbound (westbound) Aztec Blvd. The marker is several tenths of a mile before the intersection with Ruins Road and therefore does not afford a visual connection with the actual ruins. The marker has little to no pull-out lane for visitors to use. There is also a marker on the eastbound lane just west of the Aztec Boulevard and Ruins Road intersection.

3.4 Recreation Conditions, Issues and Concerns

As noted earlier, biking is allowed on the road to the Monument. The community plans to construct a bicycle/pedestrian trail along the west side of town to the Monument. Local residents are expected to be the primary users of the trail, but the bike trail could be promoted to tourists in tourism literature.

The West Ruins is accessed by a paved pedestrian trail. Recreational use will be expanded with new recreation trails proposed elsewhere within the expanded boundary.

The picnic area near the Visitor Center parking lot contains six picnic tables. Four sites on the lawn have one table each, and the site on pavement contains two tables. All the tables have been constructed so that they can be used by people in wheelchairs, thus complying with the Americans with Disabilities Act. However, those located on the lawn are more difficult to access.

3.5 Tribal Issues

Aztec Ruins National Monument staff conduct Native American Graves Protection and Repatriation Act (NAGPRA) consultations with 23 Tribes from the region. Any museum displays and plans for construction or development are reviewed by the associated tribes in consultation meetings that are scheduled once a year, with ongoing consultation on project basis throughout. Modern use occurs at the Aztec site for religious and cultural activities. Privacy for conducting ceremonies is an issue at the site. Tribal officials do not favor expanding areas for public visitation or excavation of sites for data collection and scientific investigations. Tribal concerns were less concerning visitation impact at this site than other sites. The Aztec site is less advertised and its location on the edge of town makes it less of a destination tourist attraction than other sites.

■ 4.0 Planning and Coordination

4.1 Unit Plans

The General Management Plan (1989) and Land Protection Plan (LPP, 1993) clearly spell out a process for acquiring the rest of the now privately held land within the new (1988) boundaries of the Monument. In general, all land is expected to be acquired through fee or easement purchase as zoning and other land use management tools have been deemed insufficient to protect the archaeological resources. The exception to this rule is subsurface oil and gas rights. "While these operations are not especially compatible with park purposes, the cost of acquiring these interests while in production is expected to be substantially in excess of any potential benefit to park operations and protection (LPP, 1993, p. 35)."

4.2 Public and Agency Coordination

The Park's superintendent has been a Board Member of the local Chamber of and other local organizations. As such there is ongoing dialogue about the role of the Monument in relation to the City.

■ 5.0 Assessment of Need and System Options

5.1 Magnitude of Need

The need for ATS at Aztec National Monument is important in the sense of creating a sustainable, culturally appropriate connection between modern society and ancient ruins, but not urgent in the sense of impending safety or operational problems.

5.2 Feasible Alternatives

There are two feasible alternatives suggested to assist the Park in meeting its goals, while providing a safe and enjoyable visit to Aztec Ruins. Feasible alternatives include a bicycle/pedestrian trail system from downtown Aztec to the Monument via a new trail system and a circulator shuttle system from downtown Aztec to the Aztec Ruins via existing roads.

1. Bicycle/Pedestrian Trail System: Downtown Aztec to the Monument Via New Trail System.

This alternative would assume the construction of a new bicycle and pedestrian bridge over the Animas River and the construction of a 12-foot wide trail made of either asphalt or concrete. This would be used primarily for recreation. Providing alternative access to the Monument would be a secondary benefit. It is assumed that the path would be placed on the land acquired by the City, but no longer being used for a NM 44 extension. A local group is currently discussing the possibility of a pedestrian bridge about 1.5 miles south of the Monument.

- Path length: 2,100 feet or 0.4 miles from the monument to the south side of NM 550 at a cost of \$30 per linear foot, \$63,000
- Animas River pedestrian bridge: 150 feet, approximate cost \$180,000
- Trail markings, signs, and striping. Estimated cost of \$5,000
- Total Capital Cost: \$248,000
- 20-Year Capital Cost: \$12,400 (assumes one new layer of pavement)

2. Circulator Shuttle: Downtown Aztec to the Monument Via Existing Roads.

This alternative would provide shuttle service from downtown to the Monument, every 15 minutes from June through August. The shuttle would travel from Main Street, west on Business 550 to Ruins Road. During the off-season (September through May), the City could cost-share and use the vehicles for city circulator or demand responsive service.

The Park staff feels that this alternative is not economically feasible for the number of people that might use it. Farmington (population 40,000 and located just south of Aztec) has just initiated a small transit system that connects most of the major shopping areas and the community college. Adding a route to the Monument is a strong possibility.

- Route length: 2.0 miles round trip
- Vehicle Interval: 15 minutes (assumes a fixed-route system)
- Shuttle Capacity: 20
- Hours of Operation: 8:00 a.m. to 5:00 p.m. (nine hours per day)
- Number of Shuttles: two (one in operation, one spare)
- Fee: \$1.00 per visitor, included in entry fee price
- Capital Cost: \$150,000
- 20-Year Capital Cost: \$300,000 (assuming a single replacement of the two shuttles)
- Annual Operating Cost: \$24,000 (\$240 per day for 100 summer season days)

■ 6.0 Bibliography

National Park Service. Draft General Management Plan/Development Concept Plan Environmental Assessment. 1988.

National Park Service. General Management Plan/Development Concept Plan. September 1989.

National Park Service. Statement for Management, Aztec Ruins National Monument. April 1993.

National Park Service. Aztec Ruins National Monument Land Protection Plan. March 1993.

Nu-Metrics. Traffic Count Data. November 14-15, 1995.

Paul Mooney, Regional Planner. *Memorandum: Ruins Road Traffic Count.* (Memo transmitting Nu-Metrics Data.) Northwest New Mexico Council of Governments. November 21, 1995.

Riley Marketing, Inc. Map of Farmington New Mexico with Aztec and Bloomfield. 1999 Edition.

Aztec National Monument. "Park Visits and Disease: A Few Precautions." Rev. 6/99.

Aztec National Monument. "User Fees Improve this Park." Undated.

Aztec National Monument. "Visit Planner." Rev. 5/99.

Aztec National Monument. "Official Map and Guide." GPO: 1997-417-648/40234. Reprint 1997.

Aztec National Monument. "Changes Ahead." Rev. 6/99.

Aztec Chamber of Commerce. "General Tourist Information 1999/Town Statistics."

City of Aztec, Planning Department. "Aztec's Community Development Plan." June 1, 1999.

National Park Service. "Recreation Visits 1991-1998." Found on the Internet web site, http://www2.nature.nps.gov/stats/dec9199.htm. Printed 8/16/99.

Aztec National Monument. "Visitation Figures: Aztec National Monument, Calendar Year Comparisons 1996 – 1999). June 1999.

City of Aztec, Planning Department. "City of Aztec Zone Map." February 1999 Update.

Southwest Parks and Monuments Association. "A Trail Guide to Aztec Ruins." 3rd Printing: 30M/SPMA/1998.

Aztec Chamber of Commerce. "Aztec, New Mexico." 1996.

Aztec Ruins National Monument. "Aztec Ruins National Monument Worksheet." Reporting period October 1, 1998 – August 31, 1999. Daily visitation data transmitted September 30, 1999.

■ 7.0 Persons Interviewed

Erick Aune, City Planner. Interviewed on August 16, 1999.

Erick Aune, City Planner. E-mail discussion on September 30, 1999.

Barry Cooper, Superintendent. Interviewed on August 16, 1999.

Barry Cooper, Superintendent. E-mail discussion on September 30, 1999.